

REMARKS

The present invention comprises a magnetic disk drive and system for erasing information from the magnetic disks in the disk drive using a high strength magnetic field while the disks are still inside the disk drive assembly. The design of the drive enclosure provides a reduced thickness in a localized region over the disks. This allows a narrower working magnetic gap of the drive level disk erase apparatus. The localized region of the drive is a formed indentation on the top cover, elimination of flange, and reduced floor thickness of the base.

In contrast, the cited prior art reference, *Serizawa*, discloses a disk eraser that is designed to erase the disks of completely conventional disk drive enclosures. There is not one word in *Serizawa* that addresses modifying the design of drive enclosures, much less to making drive enclosures more geometrically conducive to erasing disks! The Examiner cites numerous passages that generally discuss the components of the *Serizawa* disk drive. However, none of these passages actually address the design, shape, or dimensions of the enclosure itself—which goes to the heart of the present invention. Moreover, *Serizawa* is merely cumulative prior art to Applicant's Admitted Prior Art described in the Background section of the present application. Page 2, paragraph 6; page 3, paragraph 9 – page 4, paragraph 13. Again, none of this prior art addresses the design of the enclosure.

Furthermore, other than prior art Figure 13, only Figure 10 of *Serizawa* even shows a side profile of the enclosure (cover 14 and base 12). Figure 13 shows a completely conventional rectangular box enclosure. Figure 13 also shows a huge magnetic gap (much larger than the overall thickness of the enclosure). Figure 10 shows the contours of the enclosure design. Cover 14 is completely flat with no reduction in axial thickness. At first glance, the base 12 appears to show a reduction in axial thickness at the right, but careful inspection reveals a cylindrical shape (not numbered) that protrudes below the right edge. This cylindrical relief is provided to

accommodate the disks and is drawn at the same depth or thickness as the overall thickness of the base 12. The inner cylindrical wall (not numbered, but closest to the lead line of reference numeral 12) clearly validates this large dimension. Finally, *Serizawa's* Figures 2 and 3 clearly reveal a depth of insertion of the enclosure into the eraser that would require a large magnetic gap wide enough to engulf the maximum thickness of the enclosure (compare Figure 10 with Figures 2 and 3).

Accordingly, Applicant maintains that the original Claims 1 – 17 are in condition for allowance. Each claim contains language that readily distinguishes the prior art. For example, both independent Claims 1 and 9 require the enclosure to have a disk region located over at least a portion of the storage area of the magnetic disk. The disk region has an axial thickness that is less than the axial thickness of the enclosure to define a working magnetic gap for erasing the magnetic disk while the magnetic disk is inside the enclosure. Again, *Serizawa* does not mention one word about the geometry of its enclosure (suggesting a completely conventional design), and a study of its Figure 10 clearly validates this conclusion.

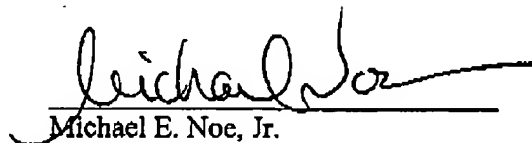
Similarly, each of the dependent claims further distinguish the prior art. For example, Claims 2 and 11 state that "the disk region is located on portions of both the base and the cover." In contrast, *Serizawa's* cover 14 (Figure 10) is completely flat. Claims 3 and 12 require the disk region to be formed by "an indentation in the enclosure." *Serizawa's* cover is flat and has no indentation, and its base has a large cylindrical relief for the disks with no indentation. Similarly, Claims 4 and 13 depend from their respective preceding claims and state that "the indentation is a rectangular notch." No such configuration is shown or described in the prior art. Claims 5 and 14 require the disk region to have "a length extending in a radial direction, relative to the axis of the magnetic disk that spans an entire radial length of the storage area of the magnetic disk, such that the entire storage area may be erased. These structural portions in *Serizawa* do not even appear in Figure 10, much less in its text. Claims 6, 7, 15, and 16 depend

from Claims 5 and 14, respectively, and contain even more structural limitations that are not shown in *Serizawa*.

Finally, Claims 8 and 17 state, "the working magnetic gap reduces stray magnetic fields to prevent motor rotor demagnetization damage, and increases a gradient of magnetic flux density as the hard disk drive is inserted into a disk erase apparatus." This language cannot be satisfied unless the strength of the magnetic field is reduced to a lower level that is required to span only a small axial thickness in the disk region. Magnetic fields that must penetrate larger geometric enclosures (like *Serizawa*) must be stronger than required to merely erase the disks and, thus, run the inherent risk of damaging the spindle motor rotor. Thus, these claims cannot be satisfied by that reference.

It is respectfully submitted that the claims are in condition for allowance and favorable action is requested. No fee for an extension of time or other fees are believed to be required. However, in the event that one or more fees are required, please charge them to **Hitachi Global Storage Technologies' Deposit Account Number 50-2587**.

Respectfully submitted,



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